

## Abstract

An ablation resistant, monolithic, activated, carbon foam produced by the activation of a coal-based carbon foam through the action of carbon dioxide, ozone or some similar oxidative agent that pits and/or partially oxidizes the carbon foam skeleton, thereby significantly increasing its overall surface area and concurrently increasing its filtering ability. Such activated carbon foams are suitable for application in virtually all areas where particulate or gel form activated carbon materials have been used. Such an activated carbon foam can be fabricated, i. e. sawed, machined and otherwise shaped to fit virtually any required filtering location by simple insertion and without the need for handling the “dirty” and friable particulate activated carbon foam materials of the prior art.